



PHILIP MORRIS PRODUCTS, INC.

PANAMA TEST #373

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PANAMA TEST #373

Twenty one cigarette brands of August production were received from Panama on October 1, 1992.

A less permeable cigarette paper was observed for the current Marlboro Lights Long Size cigarettes, returning to the level reported prior to Test #372. A higher rod density was also noted.

Lower total reducing sugars were observed for the current Viceroy Lights Long Size cigarettes.

## MANUFACTURER

PHILIP MORRISBRITISH  
AMERICAN TOBACCOMarlboro Lights  
Long Size 20's (Box)Viceroy Lights  
Long Size 20's (Box)Current   PreviousCurrent   PreviousSmoke

Butt Length, mm	30.0	30.0	28.0	28.0
FTC Tar, mg/cigt.	11.8	11.3	12.6	12.4
Nicotine, mg/cigt.	0.77	0.75	1.03	0.97
Puffs/Cigt.	7.6	7.6	8.3	8.9

Cigarette

Total RTD, mm of H <sub>2</sub> O	116	123 <sup>1</sup>	107	115
Length, mm	79.2	79.1	79.5	79.4
Circumference, mm	24.7	24.8	24.8	24.7

Paper

Permeability, ml/cm <sup>2</sup> x min.	24	32 <sup>1</sup>	25	25
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Filter

RTD, mm of H <sub>2</sub> O	91	93	89	97
Length, mm	20.2	20.0	21.1	21.0
Tipping Paper Length, mm	27.0	27.0	25.0	25.0
Tipping Paper Color	White	White	White	White
Ventilation, %	18	23	26	21

Filler

Total Alkaloids, % (DWB)	1.92	1.82	2.02	1.99
Total Red. Sugars, % (DWB)	4.6	4.2	7.6	9.9 <sup>2</sup>
Wt. of Tob., g (12.5% OV)	0.707	0.682	0.650	0.650 <sup>2</sup>
Rod Length, mm	59.0	59.1	58.4	58.4
Rod Density, g/cc	0.247	0.236	0.228	0.230 <sup>2</sup>
Oven Volatiles, % (Equil.)	13.2	13.2	14.0	13.2

<sup>1</sup>Results from Test #372, dated 10/27/92, where a change was noted.

<sup>2</sup>Results from Test #367, dated 5/13/92, where a change was noted.

PANAMA TEST #373

A more permeable cigarette paper was observed for the current Kent Long Size cigarettes, returning to the level reported prior to Test #367. The lower tobacco weight and rod density returned to the levels reported prior to Test #355.

The current West Long Size cigarettes were not different from the previous average in any of the characteristics tested.

## MANUFACTURER

PHILIP MORRIS

	<u>Kent Long</u> <u>Size 20's (Box)</u>		<u>West Long</u> <u>Size 20's (Box)</u>	
	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>				
Butt Length, mm	29.0	29.0	27.0	27.0
FTC Tar, mg/cigt.	13.1	12.7	14.1	14.4
Nicotine, mg/cigt.	0.95	0.90	0.96	1.01
Puffs/Cigt.	7.0	7.2	6.8	7.2
<b><u>Cigarette</u></b>				
Total RTD, mm of H <sub>2</sub> O	100	108	98	104
Length, mm	79.6	79.4	78.7	79.1
Circumference, mm	24.6	24.6	24.6	24.5
<b><u>Paper</u></b>				
Permeability, ml/cm <sup>2</sup> x min.	32	22 <sup>1</sup>	43	51
<b><u>Filter</u></b>				
RTD, mm of H <sub>2</sub> O	70	70	65	67
Length, mm	21.2	21.0	20.1	20.0
Tipping Paper Length, mm	26.0	26.0	24.0	24.0
Tipping Paper Color	White	White	Cork	Cork
Ventilation, %	16	16	None	None
<b><u>Filler</u></b>				
Total Alkaloids, % (DWB)	1.89	1.84	2.03	1.97
Total Red. Sugars, % (DWB)	5.4	5.4	6.2	5.2
Wt. of Tob., g (12.5% OV)	0.620	0.649	0.670	0.656
Rod Length, mm	58.4	58.4	58.6	59.1
Rod Density, g/cc	0.220	0.230	0.238	0.233
Oven Volatiles, % (Equil.)	12.8	12.4	13.2	13.1

<sup>1</sup>Results from Test #367, dated 5/13/92, where a change was noted.

2052590334

PANAMA TEST #373

The current Lucky Strike Long Size and L&M Long Size cigarettes were not different from their respective previous averages in any of the characteristics tested.

## MANUFACTURER

BRITISH  
AMERICAN TOBACCOPHILIP MORRISLucky Strike  
Long Size 20's (Box)L&M Long Size  
20's (Box) Puerto RicoCurrent PreviousCurrent PreviousSmoke

Butt Length, mm	29.0	29.0	27.0	27.0
FTC Tar, mg/cigt.	14.2	13.7	15.2	14.8
Nicotine, mg/cigt.	1.03	0.96	0.88	0.87
Puffs/Cigt.	8.0	7.6	7.5	7.2

Cigarette

Total RTD, mm of H <sub>2</sub> O	90	91	104	106
Length, mm	79.6	79.5	79.0	79.2
Circumference, mm	24.7	24.7	24.8	24.7

Paper

Permeability, ml/cm <sup>2</sup> x min.	26	28	39	41
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Filter

RTD, mm of H <sub>2</sub> O	60	64	67	68
Length, mm	21.5	21.1	20.0	20.0
Tipping Paper Length, mm	26.0	26.0	24.0	24.0
Tipping Paper Color	Cork	Cork	Cork	Cork
Ventilation, %	12	12	None	None

Filler

Total Alkaloids, % (DWB)	1.81	1.77	1.78	1.76
Total Red. Sugars, % (DWB)	7.3	8.0	4.6	4.8
Wt. of Tob., g (12.5% OV)	0.649	0.661	0.716	0.692
Rod Length, mm	58.1	58.4	58.9	59.1
Rod Density, g/cc	0.230	0.234	0.249	0.241
Oven Volatiles, % (Equil.)	13.4	13.1	13.4	13.1

2052590335

PANAMA TEST #373

The current Parliament Long Size cigarettes were not different from the previous average in any of the characteristics tested.

A smaller circumference was observed for the current L&M Long Size cigarettes, returning to the level reported prior to Test #372.

## MANUFACTURER

PHILIP MORRIS

	<u>Parliament Long Size 20's (Box)</u>		<u>L&amp;M Long Size 20's (Box)</u>	
	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>				
Butt Length, mm	27.0	27.0	27.0	27.0
FTC Tar, mg/cigt.	15.6	14.5	15.8	14.6
Nicotine, mg/cigt.	0.85	0.85 <sup>1</sup>	0.82	0.87
Puffs/Cigt.	7.3	7.6	7.5	7.2
<b><u>Cigarette</u></b>				
Total RTD, mm of H <sub>2</sub> O	99	100	105	105
Length, mm	79.0	79.2	79.4	79.2
Circumference, mm	24.6	24.5	24.5	24.8 <sup>2</sup>
<b><u>Paper</u></b>				
Permeability, ml/cm <sup>2</sup> x min.	44	51	33	41
<b><u>Filter</u></b>				
RTD, mm of H <sub>2</sub> O	64	64	68	68
Length, mm	19.9	19.9	20.0	20.0
Tipping Paper Length, mm	24.0	24.0	24.0	24.0
Tipping Paper Color	White	White	Cork	Cork
Ventilation, %	None	None	None	None
<b><u>Filler</u></b>				
Total Alkaloids, % (DWB)	1.69	1.79	1.81	1.75
Total Red. Sugars, % (DWB)	5.2	4.8	4.9	4.6
Wt. of Tob., g (12.5% OV)	0.696	0.693	0.664	0.667
Rod Length, mm	59.1	59.3	59.5	59.2
Rod Density, g/cc	0.245	0.244	0.234	0.230 <sup>2</sup>
Oven Volatiles, % (Equil.)	13.8	13.4	13.1	13.2

<sup>1</sup>Results from Test #370, dated 9/18/92, where a change was noted.

<sup>2</sup>Results from Test #372, dated 10/27/92, where a change was noted.

2052590336

PANAMA TEST #373

A less permeable cigarette paper was observed for the current Marlboro Long Size cigarettes, returning to the level reported prior to Test #372.

Higher total alkaloids were observed for the current L&M Long Size Menthol cigarettes. A higher rod density was also noted.

## MANUFACTURER

PHILIP MORRIS

	<u>Marlboro Long Size 20's (Box)</u>			<u>L&amp;M Long Size Menthol 20's (Box)</u>	
	<u>Current</u>	<u>Previous</u>	<u>U.S.<sup>1</sup></u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>					
Butt Length, mm	27.0	27.0	26.0	27.0	27.0
FTC Tar, mg/cigt.	16.0	15.3	15.9	16.2	15.9
Nicotine, mg/cigt.	0.93	0.91	1.16	1.08	1.08
Puffs/Cigt.	7.4	7.2	8.7	7.7	7.7
<b><u>Cigarette</u></b>					
Total RTD, mm of H <sub>2</sub> O	107	107	109	94	91
Length, mm	79.7	79.3	79.4	79.7	79.8
Circumference, mm	24.5	24.5	25.0	24.5	24.6
<b><u>Paper</u></b>					
Permeability, ml/cm <sup>2</sup> x min.	26	35 <sup>2</sup>	29	59	95
<b><u>Filter</u></b>					
RTD, mm of H <sub>2</sub> O	65	68	68	57	56
Length, mm	20.2	20.0	18.8	20.1	19.9
Tipping Paper Length, mm	24.0	24.0	23.0	24.0	24.0
Tipping Paper Color	Cork	Cork	Cork	Cork	Cork
Ventilation, %	None	None	14	None	None
<b><u>Filler</u></b>					
Total Alkaloids, % (DWB)	1.82	1.84	1.91	2.07	1.84
Total Red. Sugars, % (DWB)	4.5	4.3	6.4	6.8	5.8
Wt. of Tob., g (12.5% OV)	0.676	0.673	0.706	0.676	0.653
Rod Length, mm	59.5	59.3	60.6	59.6	59.8
Rod Density, g/cc	0.237	0.237	0.235	0.237	0.227
Oven Volatiles, % (Equil.)	13.5	13.1	13.5	13.3	13.4
<b><u>Menthol, mg/cigt.</u></b>					
Smoke	-	-	-	0.41	0.51
Filler	-	-	-	1.5	1.8
Filter	-	-	-	0.7	0.8

<sup>1</sup>Data From C.I. No. 9/92.

<sup>2</sup>Results from Test #372, dated 10/27/92, where a change was noted.

PANAMA TEST #373

The current Merit King Size and Kool King Size Menthol cigarettes were not different from their respective previous averages in any of the characteristics tested.

## MANUFACTURER

PHILIP MORRISBRITISH  
AMERICAN TOBACCOMerit King  
Size 20's (SP)Kool King Size  
Menthol 20's (SP)

	<u>Current</u>	<u>Previous</u>	<u>U.S.<sup>1</sup></u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>					
Butt Length, mm	35.0	35.0	35.0	28.0	28.0
FTC Tar, mg/cigt.	9.2	8.4	7.7	13.7	12.8
Nicotine, mg/cigt. —	0.59	0.56	0.63	0.97	0.94
Puffs/Cigt.	7.5	7.3	7.7	7.0	7.1
<b><u>Cigarette</u></b>					
Total RTD, mm of H <sub>2</sub> O	116	121	120	99	100
Length, mm	83.0	83.2	84.2	83.1	83.2
Circumference, mm	24.8	24.8	24.9	24.6	24.6
<b><u>Paper</u></b>					
Permeability, ml/cm <sup>2</sup> x min.	50	54	47	82	86
<b><u>Filter</u></b>					
RTD, mm of H <sub>2</sub> O	95	104	110	57	57
Length, mm	25.2	25.0	26.6	21.3	21.2
Tipping Paper Length, mm	32.0	32.0	32.0	25.0	25.0
Tipping Paper Color	Cork	Cork	Cork	Cork	Cork
Ventilation, %	22	25	33	None	None
<b><u>Filler</u></b>					
Total Alkaloids, % (DWB)	1.74	1.77	1.91	2.15	2.05
Total Red. Sugars, % (DWB)	4.4	4.4	6.0	6.7	6.1
Wt. of Tob., g (12.5% OV)	0.683	0.697	0.673	0.658	0.667
Rod Length, mm	57.8	58.2	57.7	61.8	62.0
Rod Density, g/cc	0.241	0.245	0.236	0.221	0.223
Oven Volatiles, % (Equil.)	13.6	13.3	13.4	13.7	13.0
<b><u>Menthol, mg/cigt.</u></b>					
Smoke	-	-	-	0.39	0.45 <sup>2</sup>
Filler	-	-	-	1.7	1.6
Filter	-	-	-	0.9	0.8

<sup>1</sup>Data From C.I. No. 9/92.

<sup>2</sup>Results from Test #370, dated 9/18/92, where a change was noted.

PANAMA TEST #373

A lower nicotine delivery was observed for the current West King Size cigarettes, returning to the level reported prior to Test #366.

A higher nicotine delivery was observed for the current Belmont King Size cigarettes, correlating with higher total alkaloids.

## MANUFACTURER

PHILIP MORRISBRITISH  
AMERICAN TOBACCOWest King  
Size 20's (SP)Belmont King  
Size 20's (SP)Current PreviousCurrent PreviousSmoke

Butt Length, mm	27.0	27.0	28.0	28.0
FTC Tar, mg/cigt.	13.9	14.5	14.2	13.7
Nicotine, mg/cigt.	0.85	1.01	1.08	0.91
Puffs/Cigt.	7.2	7.8	7.4	7.3

Cigarette

Total RTD, mm of H <sub>2</sub> O	101	103	92	100
Length, mm	83.2	83.4	83.1	83.2
Circumference, mm	24.5	24.5	24.6	24.6

Paper

Permeability, ml/cm <sup>2</sup> x min.	44	50	47	47
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Filter

RTD, mm of H <sub>2</sub> O	68	68	52	57
Length, mm	20.2	20.0	21.3	21.1
Tipping Paper Length, mm	24.0	24.0	25.0	25.0
Tipping Paper Color	Cork	Cork	Cork	Cork
Ventilation, %	None	None	None	None

Filler

Total Alkaloids, % (DWB)	1.90	1.96	1.94	1.66
Total Red. Sugars, % (DWB)	6.3	5.1	9.0	9.1 <sup>1</sup>
Wt. of Tob., g (12.5% OV)	0.682	0.697	0.688	0.681
Rod Length, mm	63.0	63.4	61.8	62.1
Rod Density, g/cc	0.226	0.230	0.231	0.228
Oven Volatiles, % (Equil.)	13.6	13.0	13.0	12.6

<sup>1</sup>Results from Test #367, dated 5/13/92, where a change was noted.



PANAMA TEST #373

The current Imperial King Size Menthol and Viceroy King Size cigarettes were not different from their respective previous averages in any of the characteristics tested.

## MANUFACTURER

BRITISH AMERICAN TOBACCO

	<u>Imperial King Size Menthol 20's (SP)</u>		<u>Viceroy King Size 20's (SP)</u>	
	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>				
Butt Length, mm	28.0	28.0	28.0	28.0
FTC Tar, mg/cigt.	14.6	14.1	15.1	14.4
Nicotine, mg/cigt.	0.95	0.94	1.09	1.02
Puffs/Cigt.	7.2	7.4	7.6	7.5
<b><u>Cigarette</u></b>				
Total RTD, mm of H <sub>2</sub> O	102	103	98	96
Length, mm	82.9	83.2	83.0	83.2
Circumference, mm	24.6	24.7	24.6	24.6
<b><u>Paper</u></b>				
Permeability, ml/cm <sup>2</sup> x min.	24	26	55	52
<b><u>Filter</u></b>				
RTD, mm of H <sub>2</sub> O	53	57	58	58
Length, mm	21.2	21.2	21.1	21.1
Tipping Paper Length, mm	25.0	25.0	25.0	25.0
Tipping Paper Color	White	White	Cork	Cork
Ventilation, %	None	None	None	None
<b><u>Filler</u></b>				
Total Alkaloids, % (DWB)	1.65	1.54	2.07	1.99
Total Red. Sugars, % (DWB)	7.6	7.2	8.7	8.7
Wt. of Tob., g (12.5% OV)	0.665	0.675	0.692	0.684
Rod Length, mm	61.6	62.0	61.9	62.1
Rod Density, g/cc	0.224	0.225	0.231	0.228
Oven Volatiles, % (Equil.)	13.2	12.6	13.5	12.9
<b><u>Menthol, mg/cigt.</u></b>				
Smoke	0.36	0.38	-	-
Filler	1.4	1.5	-	-
Filter	0.9	0.9	-	-

PANAMA TEST #373

A lower rod density was observed for the current Monterey Extra King Size cigarettes, correlating with a larger circumference.

Higher smoke deliveries were observed for the current Record King Size cigarettes, correlating with a higher tobacco weight and rod density.

## MANUFACTURER

PHILIP MORRISBRITISH  
AMERICAN TOBACCOMonterey Extra King  
Size 20's (Blue SP)Record King  
Size 20's (SP)Current PreviousCurrent PreviousSmoke

Butt Length, mm	27.0	27.0	28.0	28.0
FTC Tar, mg/cigt.	15.2	14.5	15.3	13.7
Nicotine, mg/cigt.	1.02	1.00	1.12	0.90
Puffs/Cigt.	7.4	7.8	7.6	7.5

Cigarette

Total RTD, mm of H <sub>2</sub> O	101	101	97	108 <sup>1</sup>
Length, mm	82.9	83.5	83.2	83.1
Circumference, mm	24.9	24.5	24.6	24.6

Paper

Permeability, ml/cm <sup>2</sup> x min.	42	47	23	28
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Filter

RTD, mm of H <sub>2</sub> O	66	68	53	59
Length, mm	20.0	20.0	21.1	21.1
Tipping Paper Length, mm	24.0	24.0	25.0	25.0
Tipping Paper Color	White	White	Cork	Cork
Ventilation, %	None	None	None	None

Filler

Total Alkaloids, % (DWB)	1.94	1.99	1.77	1.75
Total Red. Sugars, % (DWB)	5.3	5.4	8.2	10.0
Wt. of Tob., g (12.5% OV)	0.685	0.712	0.696	0.663
Rod Length, mm	62.9	63.5	62.1	62.0
Rod Density, g/cc	0.221	0.235	0.233	0.223
Oven Volatiles, % (Equil.)	13.1	13.1	12.9	13.0

<sup>1</sup>Results from Test #367, dated 5/13/92, where a change was noted.

2052590341

PANAMA TEST #373

Higher smoke deliveries were observed for the current Nacional King Size cigarettes, correlating with a higher tobacco weight and rod density. The smoke deliveries returned to the levels reported prior to Test #370.

Higher tobacco weight and rod density were observed for the current Mentolados King Size Menthol cigarettes.

## MANUFACTURER

PHILIP MORRIS

	<u>Nacional King Size 20's (SP)</u>		<u>Mentolados King Size Menthol 20's (SP)</u>	
	<u>Current</u>	<u>Previous</u>	<u>Current</u>	<u>Previous</u>
<b><u>Smoke</u></b>				
Butt Length, mm	27.0	27.0	27.0	27.0
FTC Tar, mg/cigt.	15.7	13.9	16.3	15.4
Nicotine, mg/cigt.	1.06	0.86 <sup>1</sup>	1.19	1.08
Puffs/Cigt.	7.8	7.7	8.1	7.6
<b><u>Cigarette</u></b>				
Total RTD, mm of H <sub>2</sub> O	108	101	106	103
Length, mm	83.2	83.4	82.8	83.5
Circumference, mm	24.5	24.5	24.6	24.5
<b><u>Paper</u></b>				
Permeability, ml/cm <sup>2</sup> x min.	36	36	39	44
<b><u>Filter</u></b>				
RTD, mm of H <sub>2</sub> O	66	67	67	69
Length, mm	20.0	20.0	20.0	20.0
Tipping Paper Length, mm	24.0	24.0	24.0	24.0
Tipping Paper Color	Cork	Cork	White	White
Ventilation, %	None	None	None	None
<b><u>Filler</u></b>				
Total Alkaloids, % (DWB)	1.90	1.98	1.98	1.94
Total Red. Sugars, % (DWB)	5.7	5.4	7.2	6.7
Wt. of Tob., g (12.5% OV)	0.732	0.695	0.738	0.691
Rod Length, mm	63.2	63.3	62.9	63.5
Rod Density, g/cc	0.242	0.229	0.243	0.228
Oven Volatiles, % (Equil.)	13.5	13.0	13.6	13.2
<b><u>Menthol, mg/cigt.</u></b>				
Smoke	-	-	0.60	0.49
Filler	-	-	2.2	1.8
Filter	-	-	1.0	1.0

<sup>1</sup>Results from Test #370, dated 9/18/92, where a change was noted.

PANAMA TEST #373

The lower tar delivery observed for the current Benson & Hedges 100 cigarettes returned to the level reported in Test #368.

MANUFACTURER

PHILIP MORRISBenson & Hedges100 20's (SP)

	<u>Current</u>	<u>Previous</u>	<u>U.S.</u> <sup>1</sup>
<b><u>Smoke</u></b>			
Butt Length, mm	33.0	33.0	35.0
FTC Tar, mg/cigt.	14.7	16.2 <sup>2</sup>	15.4
Nicotine, mg/cigt.	0.90	1.01	1.22
Puffs/Cigt.	8.7	9.1	10.5
<b><u>Cigarette</u></b>			
Total RTD, mm of H <sub>2</sub> O	118	119	114
Length, mm	98.7	99.0	99.7
Circumference, mm	24.6	24.6	24.9
<b><u>Paper</u></b>			
Permeability, ml/cm <sup>2</sup> x min.	50	56	32
<b><u>Filter</u></b>			
RTD, mm of H <sub>2</sub> O	77	75	73
Length, mm	25.1	25.0	27.3
Tipping Paper Length, mm	30.0	30.0	32.0
Tipping Paper Color	White	White	White
Ventilation, %	None	None	17
<b><u>Filler</u></b>			
Total Alkaloids, % (DWB)	1.63	1.77	1.96
Total Red. Sugars, % (DWB)	6.2	4.4	7.4
Wt. of Tob., g (12.5% OV)	0.826	0.837	0.849
Rod Length, mm	73.6	74.0	72.4
Rod Density, g/cc	0.233	0.235	0.237
Oven Volatiles, % (Equil.)	14.0	13.5	13.7

<sup>1</sup>Data From C.I. No. 9/92.

<sup>2</sup>Results from Test #370, dated 9/18/92, where a change was noted.